SPECIFICATIONS:

The Handheld Scanner or Tricorder, is a combination of devices assembled in a new way to provide security agencies or other offices as a mobile way to record threats or events detrimental to Human life. The basic structure of the device is a Palm OS PDA (see Figure 1a) or Microsoft CE device on top of a sensor pack that can hold sensors (see Figure 1b) in a separate case that detects Radiation, Heat, UV, Smoke, movement, direction via electronic Compass or GPS device, Mapping, and the ability to use the built in PDA software to record photographs of the scene and take notes.

The sensor pack is controlled by a BrainStem robotic controller that takes in data in from sensors attached to its main three (3) input ports (see Figure 1c), it can accept raw data from any kind of sensor in Analog, Serial or IIC (I squared C) formats. The Programming (see Figure 1e) of the Brainstem steps to each sensor in round robin fashion, and storing the sensor data in its memory. On command, it transmits the data to the Palm, where a special program accepts the Data streamed in by an RS232 connection, and alerts the user to threats or events by evaluating the raw data and presenting it on the screen all at one time. If the PDA device can hold a camera, like the EyeModule2 on the Prism pictured in Figure 1a. The PDA devotes a part of the screen to stream the video constantly. The Camera has a mechanical shutter and the PDA software has a software shutter, where pictures can be taken on the scene, or when another sensor sends a value, the program on the PDA can evaluate it and decide to snap a picture automatically.

The sensor pack (see Figure 1d) has a number of Sensors. An Electronic Compass that can show direction (N, NE, E, etc), a I.R. Range finder, a distance measuring device, a Heat

Sensor that can display any heat source in degrees, a Geiger Mueller Tube that in conjunction with a DC to DC adapter and 300 volt Capacitor, can read Alpha and Gamma radioactive hot spots, a GPS module with GPS mapping software on the PDA to show location, or mapping software for non-GPS equipped Sensors.

The Handheld Scanner is meant to be carried by security personnel by hand. The limits of the sensors can be programmed to alert the User or to trigger some operation automatically. The Handheld Scanner is designed to operate both the PDA and sensor pack from a 9.6 rechargeable Lithium Ion Battery. Because the PDA is attached to the sensor pack, the length of RS232 cable can be quite long. So the sensor pack can be fixed and powered by the rechargeable battery, a vehicle or buildings power supply. If the sensor pack is fixed and power is generated from an electrical outlet, the power limitations and number of sensors is irrelevant, the sensor pack can handle any kind of sensor and does not need to be carried by hand. The PDA can be mounted for the Users convenience and powered by a wall socket, vehicle wiring or by its internal rechargeable battery, making it more useful.

The claims will show how it can be used in detail. The User also has access to all normal Internal PDA software, like the Palm OS Notepad, to take notes at the time of the event. The PDA also has an internal clock and calendar, which can report or log date and time during an Event. The Visors' EyeModule2 Software uses a Time and Date stamp when it records a picture when one of the shutters are pressed, or activated by a software trigger.